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F2R

Purified Mouse Monoclonal Antibody
Catalog # AO2643a

Product Information

Application	WB, IHC, ICC, E
Primary Accession	P25116
Reactivity	Human
Host	Mouse
Clonality	Monoclonal
Clone Names	5E2G12
Isotype	Mouse IgG1
Calculated MW	47441
Immunogen	Purified recombinant fragment of human F2R (AA: 42-176) expressed in E. Coli.
Formulation	Purified antibody in PBS with 0.05% sodium azide

Additional Information

Gene ID	2149
Other Names	TR; HTR; CF2R; PAR1; PAR-1
Dilution	WB~~ 1/500 - 1/2000 IHC~~1:100~500 ICC~~N/A E~~ 1/10000
Storage	Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	F2R is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	F2R (HGNC:3537)
Synonyms	CF2R, PAR1, TR
Function	High affinity receptor that binds the activated thrombin, leading to calcium release from intracellular stores (PubMed:1672265, PubMed:8136362). The thrombin-activated receptor signaling pathway is mediated through PTX-insensitive G proteins, activation of phospholipase C resulting in the production of 1D-myo-inositol 1,4,5- trisphosphate (InsP3) which binds to InsP3 receptors causing calcium release from the stores (By similarity). In astrocytes, the calcium released into the cytosol allows the Ca(2+)-dependent

release of L- glutamate into the synaptic cleft through BEST1, that targets the neuronal postsynaptic GRIN2A/NMDAR receptor resulting in the synaptic plasticity regulation (By similarity). May play a role in platelets activation and in vascular development (PubMed:10079109). Mediates up- regulation of pro-inflammatory cytokines, such as MCP-1/CCL2 and IL6, triggered by coagulation factor Xa (F10) in cardiac fibroblasts and umbilical vein endothelial cells (PubMed:30568593, PubMed:34831181).

Cellular Location Cell membrane {ECO:0000250|UniProtKB:P26824}; Multi-pass membrane protein {ECO:0000250|UniProtKB:P26824}

Tissue Location Platelets and vascular endothelial cells.

References

1.Respirology. 2015 Nov;20(8):1285-7. 2.J Neurosci. 2015 Jan 14;35(2):776-85.

Images

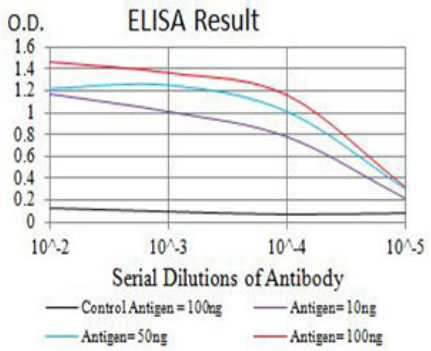


Figure 1:Black line: Control Antigen (100 ng);Purple line: Antigen (10ng); Blue line: Antigen (50 ng); Red line:Antigen (100 ng)

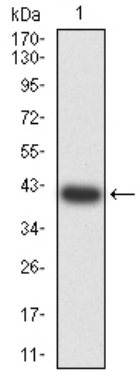


Figure 2:Western blot analysis using F2R mAb against human F2R (AA: 42-176) recombinant protein. (Expected MW is 41.3 kDa)

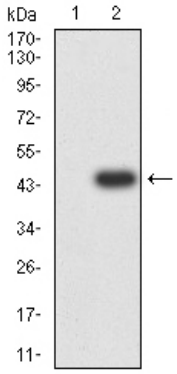


Figure 3:Western blot analysis using F2R mAb against HEK293 (1) and F2R (AA: 42-176)-hIgGFc transfected HEK293 (2) cell lysate.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.